

(a) a binder resin comprised of at least one polyolefin resin having a cyclic structure,  
wherein the polyolefin resin having a cyclic structure comprises:

- (i) a first resin or a first resin fraction with a number average molecular weight ( $M_n$ ), as measured by GPC, of less than 7,500; and
  - (ii) a second resin or a second resin fraction with a number average molecular weight ( $M_n$ ) of 7,500 or more and a glass transition temperature  $T_g$  of lower than 70°C;
- (b) a colorant;
- (c) a function imparting agent; and
- (d) a charge control agent,

wherein:

if the second resin or second resin fraction has an intrinsic viscosity (i.v.) of 0.25 dl/g or more, and a number average molecular weight ( $M_n$ ) of 7,500 or more and a weight average molecular weight ( $M_w$ ) of 15,000 or more, as measured by the GPC method, then the second resin or second resin fraction is contained in a proportion of less than 50% by weight based on the entire binder resin.

17. The toner for developing an electrostatically charged image as claimed in claim 16, wherein the binder resin consists of 1 to 100 parts by weight of the polyolefin resin having a cyclic structure, and 99 to 0 parts by weight of a resin selected from the group consisting of a polyester resin, an epoxy resin, a polyolefin resin, a vinyl acetate resin, a vinyl acetate copolymer resin, an acrylate resin, a styrene-acrylate resin, hybrid polymers and mixtures thereof.

18. The toner for developing an electrostatically charged image as claimed in claim 16, wherein the polyolefin resin having a cyclic structure has at least one polar functional group.

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19. The toner for developing an electrostatically charged image as claimed in claim 18, wherein the polyolefin resin having a cyclic structure has at least one polar functional group selected from the group consisting of a carboxyl group, a hydroxyl group and an amino group.
20. The toner for developing an electrostatically charged image as claimed in claims 16 to 19, wherein the polyolefin resin having a cyclic structure is an ionomer.
21. The toner for developing an electrostatically charged image as claimed in any one of claims 16 to 19, wherein the polyolefin resin having a cyclic structure has a crosslinked structure.
22. The toner for developing an electrostatically charged image as claimed in claim 21, wherein the polyolefin resin having a cyclic structure has a structure crosslinked by a diene monomer together with ester, amide, sulfide, ether, or an acyclic olefin and a cycloolefin and followed by reacting the system to obtain a terpolymeric polyolefin having a cyclic structure.
23. The toner for developing an electrostatically charged image as claimed in claim 22, wherein the diene monomer is selected from the group consisting of norbornadiene and cyclohexadiene.
24. The toner for developing an electrostatically charged image as claimed in any one of claim 16, further comprising at least one polar wax as the charge imparting agent.
25. The toner for developing an electrostatically charged image as claimed in claim 24, wherein at least one polar wax is selected from the group consisting of amide wax, carnauba wax, higher fatty acids and esters thereof, higher fatty acid metallic soaps, partially saponified higher fatty acid esters and higher aliphatic alcohols.
26. The toner for developing an electrostatically charged image as claimed in any one of claim 16, wherein at least one nonpolar wax is used as the function imparting agent.

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27. The toner for developing an electrostatically charged image as claimed in claim 26, wherein at least one nonpolar wax is selected from the group consisting of polyolefin wax and paraffin wax.

28. The toner for developing an electrostatically charged image as claimed in any one of claim 16, wherein the polyolefin resin having a cyclic structure comprises resins or resin fractions having three or more molecular weight ranges expressed by number average molecular weight ( $M_n$ ), as measured by GPC, of less than 7500, 7500 or more but less than 25,000, and 25,000 or more.

29. A toner for developing an electrostatically charged image, the toner comprising:

(a) a binder resin comprised of at least one polyolefin resin having a cyclic structure,

wherein the polyolefin resin having a cyclic structure comprises:

(i) a first resin or a first resin fraction with a number average molecular weight ( $M_n$ ), as measured by GPC, of less than 7,500; and

(ii) a second resin or a second resin fraction with a number average molecular weight ( $M_n$ ) of 7,500 or more and a glass transition temperature  $T_g$  of lower than 70°C;

(b) a colorant;

(c) a function imparting agent; and

(d) a charge control agent,

wherein the polyolefin resin having a cyclic structure is a copolymer of an acyclic olefin and a cyclic and/or polycyclic compound having at least one double bond; and wherein if the second resin or second resin fraction has an intrinsic viscosity (i.v.) of 0.25 dl/g or more, and a number average molecular weight ( $M_n$ ) of 7,500 or more and a weight average molecular weight ( $M_w$ )

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of 15,000 or more, as measured by the GPC method, then the second resin or second resin-fraction is contained in a proportion of less than 50% by weight based on the entire binder resin.

30. The toner for developing an electrostatically charged image as claimed in claim 29, wherein the acyclic olefin is an alpha-olefin.

31. The toner for developing an electrostatically charged image as claimed in claim 30, wherein the alpha-olefin is selected from the group consisting of ethylene, propylene and butylene.

32. The toner for developing an electrostatically charged image as claimed in claim 31, wherein the cyclic and/or polycyclic compound having at least one double bond is selected from the group consisting of cyclohexene, norbornene, tetracyclododecene and dicyclopentadiene.

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33. A liquid dried system containing 30% by weight to 50% by weight of a dried polymerized system containing 0.5% by weight to 5% by weight of a charge control agent, 1% by weight to 10% by weight of wax, 0.1% by weight to 2% by weight of aerosol silica, 1% by weight to 10% by weight of pigment and 85% by weight to 95% by weight of a binder resin, wherein the binder resin comprises a polyolefin resin having a cyclic structure; and 50% by weight to 70% by weight of an electrolytic solution.

34. A liquid toner containing 30% by weight to 50% by weight of a mixture containing 0.5% by weight to 1.5% by weight of carbon black, 0.5% by weight to 1.5% by weight of a charge control agent and 85% by weight to 95% by weight of a binder resin, wherein the binder resin comprises a polyolefin resin having a cyclic structure; and 50% by weight to 70% by weight of an electrolytic solution. - -